

period and wherein said control information carries information for a specified group of mobile stations only at predetermined times;

coding each user traffic signal using a spread spectrum code unique to each traffic signal;

adding said calling channel signal and said coded traffic signal to obtain a composite signal;

modulating said composite signal on a radio frequency carrier to form a radio frequency signal;

transmitting said radio frequency signal to said plurality of said mobile stations;

receiving said radio frequency signal at at least one of said mobile stations;

decoding said received signal in said mobile station to extract said control information; and

decoding said radio frequency signal in said mobile station to extract traffic information intended for said mobile station.

31. (Amended) [The method of claim 30] A method for paging a mobile station in a code division multiple access communication system comprising the steps of:

assigning said mobile station to a subgroup of data blocks to be transmitted on a calling channel;

encoding said subgroup of data blocks using a spread spectrum code assigned to said calling channel; and

transmitting a paging message to said mobile station in only said subgroup,
wherein a duration of each of said data blocks is equal to a duration of a speech
coder's analysis period.

32. (Amended) The method of claim [30] 31, wherein said step of assigning further comprises the step of:

using a mobile identification code associated with said mobile station to determine said assigned subgroup.

38. (Amended) A code division multiple access communication system for transmitting control information and user traffic signals from a first base station to a plurality of mobile stations comprising:

means for coding control information using a spread spectrum code unique to control information to form a calling channel signal, wherein a duration of each of a succession of data blocks in the calling channel signal is equal to a duration of a speech coder's analysis period and wherein said control information means carries information for a specified group of mobile stations only at predetermined times;

means for coding each user traffic signal using a spread spectrum code unique to each traffic signal;

means for adding said calling channel signal and said coded traffic signal to obtain a composite signal;

means for modulating said composite signal on a radio frequency carrier to form a radio frequency signal;

means for transmitting said radio frequency signal to said plurality of said mobile stations;

means for receiving said radio frequency signal at at least one of said mobile stations;

means for decoding said received signal in said mobile station to extract said control information; and

means for decoding said radio frequency signal in said mobile station to extract traffic information intended for said mobile station.


35. (Amended) [The system of claim 34] A code division multiple access communication system for paging a mobile station comprising:


means for assigning said mobile station to a subgroup of data blocks to be transmitted on a calling channel;


means for encoding said subgroup of data blocks using a spread spectrum code assigned to said calling channel; and

means for transmitting a paging message to said mobile station in only said subgroup,


wherein a duration of each of said data blocks is equal to a duration of a speech coder's analysis period.

 36. (Amended) The system of claim [34] 35, wherein said means for assigning further comprises means for using a mobile identification code associated with said mobile station to determine said assigned subgroup.

 38. (Amended) The method of claim [30] 31, further comprising receiving said paging message at said mobile station and using said paging message to maintain synchronization between the mobile station and the code division multiple access communication system.

 40. (Amended) The system of claim [34] 35, further comprising means for receiving said paging message at said mobile station and using said paging message to maintain synchronization between the mobile station and the code division multiple access communication system.

Additionally, please add new claims 41-44 as follows:

 --41. A method according to claim 30, further comprising the steps of:
powering up parts of a receiver in said mobile station during transmission of the subgroup of data blocks and powering down said parts of the receiver at other times;
receiving the subgroup of data blocks at the mobile station;

using the received subgroup of data blocks to synchronize the mobile station with the code division multiple access system; and
detecting the paging messages at the mobile station.

42. A code division multiple access communication system according to claim 34, further comprising:

means for powering up parts of a receiver in said mobile station during transmission of the subgroup of data blocks and for powering down said parts of the receiver at other times;

means for receiving the subgroup of data blocks at the mobile station;

means for using the received subgroup of data blocks to synchronize the mobile station with the code division multiple access system; and

means for detecting the paging messages at the mobile station.

43. A code division multiple access communication system for transmitting control information and user traffic signals from a first base station to a plurality of mobile stations comprising:

a calling channel modulation generator coding control information using a spread spectrum code unique to control information to form a calling channel signal, wherein a duration of each of a succession of data blocks in the calling channel signal is equal to a

duration of a speech coder's analysis period and wherein the control information carries information for a specified group of mobile stations only at predetermined times;

a traffic channel modulation generator coding each user traffic signal using a spread spectrum code unique to each traffic signal;

a summing network adding the calling channel signal and the coded traffic signals to provide a composite signal;

a mixer modulating the composite signal on a radio frequency carrier to form a radio frequency signal;

a transmit power amplifier transmitting the radio frequency signal via an antenna to the plurality of mobile stations;

a radio receiver receiving the radio frequency signal at at least one of the mobile stations; and

a correlator decoding the received signal in the at least one mobile station to extract at least one of control information and traffic information intended for the at least one mobile station.

44. A code division multiple access communication system for paging a mobile station assigned to a subgroup of mobile stations in the system, comprising:

a calling channel modulation generator encoding calling information using a spread spectrum code assigned for use with calling information to form a calling channel signal,